

NEW DESCRIPTIONS

A NEW GENUS AND SPECIES OF PYRAUSTINAE (PYRALIDAE: LEPIDOPTERA) FROM INDIA¹

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(With five text-figures)

A new species *banderdewaensis* referable to the genus *Arunamalaia* gen. nov. is reported from North-East India. The new genus is closely related to *Anamalaia* Munroe and *Mutuura*, known from South India.

INTRODUCTION

During the surveys undertaken for the collection of Pyraustin moths from various states of India, a sample of nineteen conspecific individuals was collected from Banderdewa (Arunachal Pradesh). Neither the specific status of this phenon tallied with known species nor it could be referred to any of the known Pyraustin genera. Infact, owing to the unique structures of the species, it requires a new genus for its correct placement. Accordingly, the genus *Arunamalaia* gen. nov. is proposed for this new species, named after its locality as *banderdewaensis*.

OBSERVATIONS

Genus *Arunamalaia* gen. nov.
(Gender: feminine)

Type-species: *Arunamalaia banderdewaensis*
sp. nov.

DIAGNOSIS:

Labial palpus porrect and straight, triangularly scaled, exceeding head by twice the length of latter; third segment hidden, with a sharp triangular tuft in front. Maxillary palpus

prominent, dilated with scales at extremity. Frons flat and oblique, smoothly scaled. Antenna simple, minutely ciliated in male. Fore wing with costal margin lobed behind middle in male, simple in female; termen oblique; vein R_1 arising from before anterior angle of cell; R_2 apposed to R_{3+4} ; stalk of R_{3+4} less than one-third length of free parts of R_3 and R_4 ; R_5 thick, down-curved in male due to costal lobe originating from middle of disco-cellulars, normal in female, M_1 from below R_5 and parallel to the latter; 3A not making anal loop; veins M_2 , M_3 and Cu_1 arising from posterior angle of cell; Cu_2 from cell behind two thirds. Hind wing with veins Rs and SC + R_1 anastomosing behind cell; Rs and M_1 shortly stalked; M_2 and M_3 approximated for some distance; Cu_1 from well below M_3 ; Cu_2 from cell behind two thirds. Metathoracic tibia with outer spur of both pairs minute in male.

Male genitalia: Uncus triangular, rounded at tip; setose with anteriorly directed setae on lateral margins; gnathos absent; tuba analis longer than uncus; subscaphium strongly sclerotized; tegumen broad at base, narrow towards uncus; vinculum long, highly developed; saccus short. Valva of equal width throughout; costa narrow; sacculus with a triangular setose lobe, partly covering basal lobe of harpe; harpe with an oblique heavily setose lobe with three scale like setae dorsally and with distal

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ventrally directed claw-like process, latter having denticulate dorsal margin. Transtilla short and flap-like; juxta strongly sclerotized and bifurcated basally. Aedeagus rounded at tip, with both of its walls equally sclerotized; vesica with densely packed spine-like cornuti.

Female genitalia: Corpus bursae globular, well sclerotized; signum conspicuous, marked by a pair of quadrate and semi circular signa; an accessory sac opens in corpus bursae; ductus bursae moderately long, membranous for most of its length but strongly sclerotized, with colliculum at distal end; ostium bursae surrounded by a well sclerotized genital plate; anterior apophyses long, with triangular expansions near bases; posterior apophyses short but well sclerotized; ovipositor lobes short, setose with dense arrays of setae.

***Arunamalaia banderdewaensis* sp. nov.**

(Figs. 1, 2, 3, 4, 5,)

Head with vertex covered with pale brown scales; frons flat, dressed with pale brown scales in centre and white along margins. Antenna shorter than fore wing, annulated with brown scales. Eye brownish-black, with a row of light yellow scales behind. Labial palpus with first segment white, second and third segments clad with pale and brown scales. Maxillary palpus well developed, dilated with white scales. Proboscis short, furnished with white scales. Under surface of head pure white.

Thorax clothed with pale brown scales dorsally and white ventrally. Fore wing with costal margin slightly lobed behind middle; posterior margin straight. Ground colour brownish-grey; a large fovea on posterior margin of cell in male; fringe brownish-grey. Discal cell with posterior margin curved. Hind wing with anterior margin weakly arched;

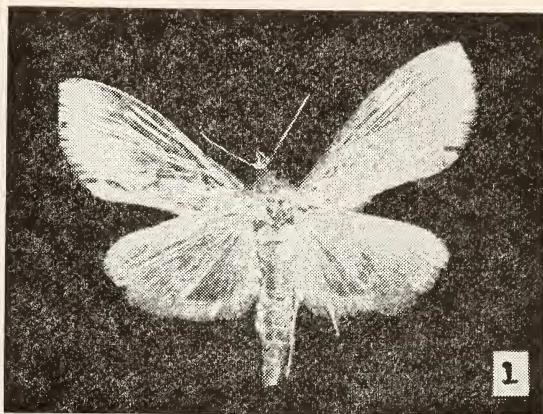


Fig. 1. *Arunamalaia banderdewaensis* sp. nov.
(Adult) holotype.

apex, termen and tornus rounded. Ground colour brown, irrorated with grey and pale scales; outer margin dark grey; basal half of costa and tornus with pale scales. Discal cell less than one-third length of wing; discocellular curved inwards anteriorly, outwardly oblique posteriorly. Legs uniformly dressed with white scales; prothoracic leg with tarsi clad with greyish brown scales.

Abdomen laden with pale-brownish and white scales on dorsal side; undersurface white.

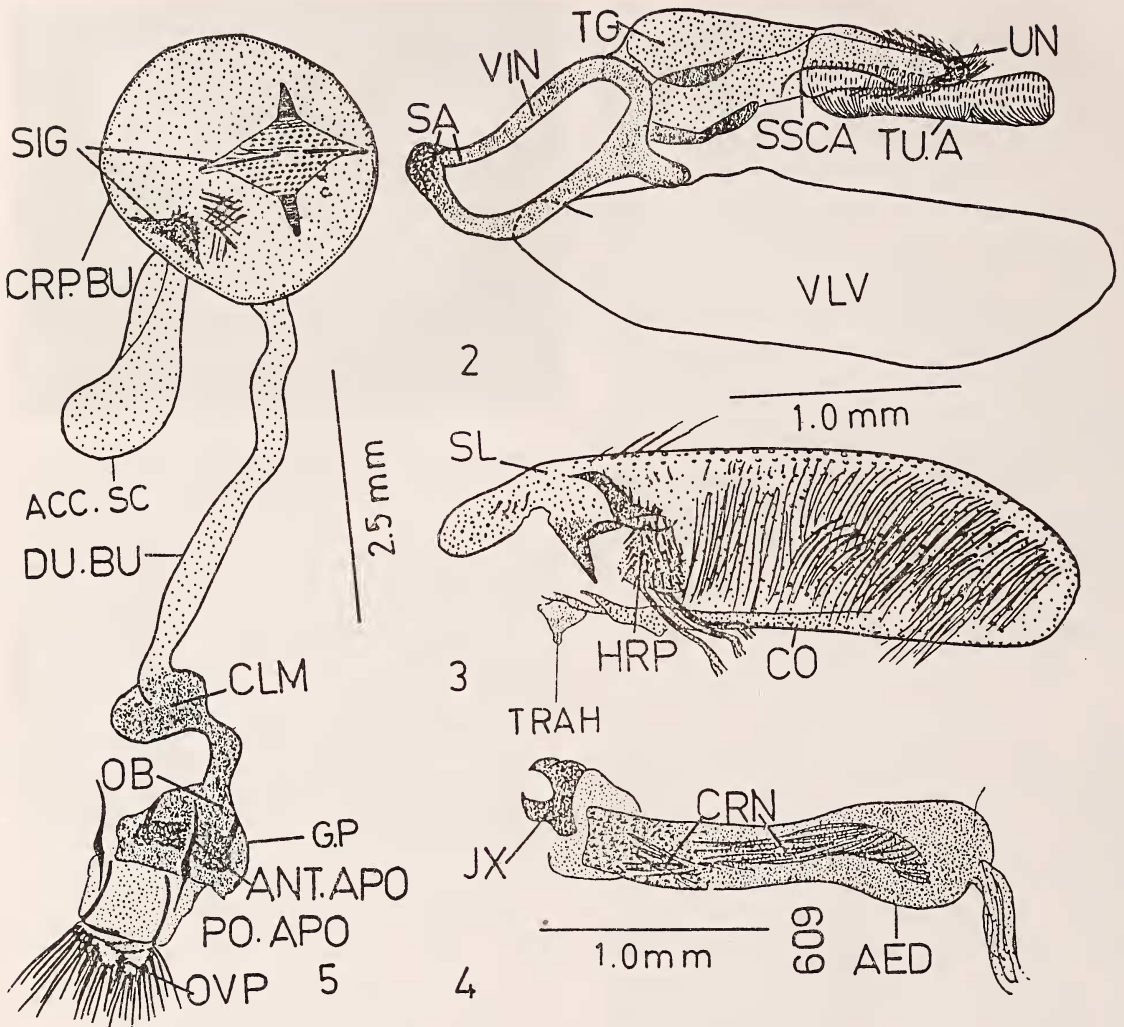
Genitalia: As described for the genus.

Wing Expanse (Half): Male : 11 mm.

Female: 12 mm.

Material Examined: Holotype: 1 ♂, Arunachal Pradesh: Subansiri, Bander-dewa, 1.v.82 — Allotype: ♀, same data as for holotype. Paratypes: 17 ♂♂, same locality date. 2-5.v.82.

Repository: Zoology Department Museum, Punjabi University, Patiala.



Figs. 2, 3, 4. Male genitalia of *A. banderdewaensis* sp. nov. (based on paratype).

Fig. 5. Female genitalia of *A. banderdewaensis* sp. nov. (based on allotype).

Abbreviations:

ACC. SC: Accessory Sac.; AED: Aedeagus; ANT. APO: Anterior apophyses; CLM: Colliculum; CO: Costa; CRN: Cornuti; CRP. BU: Corpus bursae; DU. BU: Ductus bursae; G.P: Genital plate; HRP: Harpe; JX: Juxta; OB: Ostium bursae; OVP: Ovipositor; PO. APO: Posterior apophyses; SA: Saccus; SIG: Signum; SL: Sacculus; SSCA: Subscaphium; TG: Tegumen; TRAH: Half Transtilla; TU.A: Tuba analis; UN: Uncus; VIN: Vinculum; VLV: Valva.